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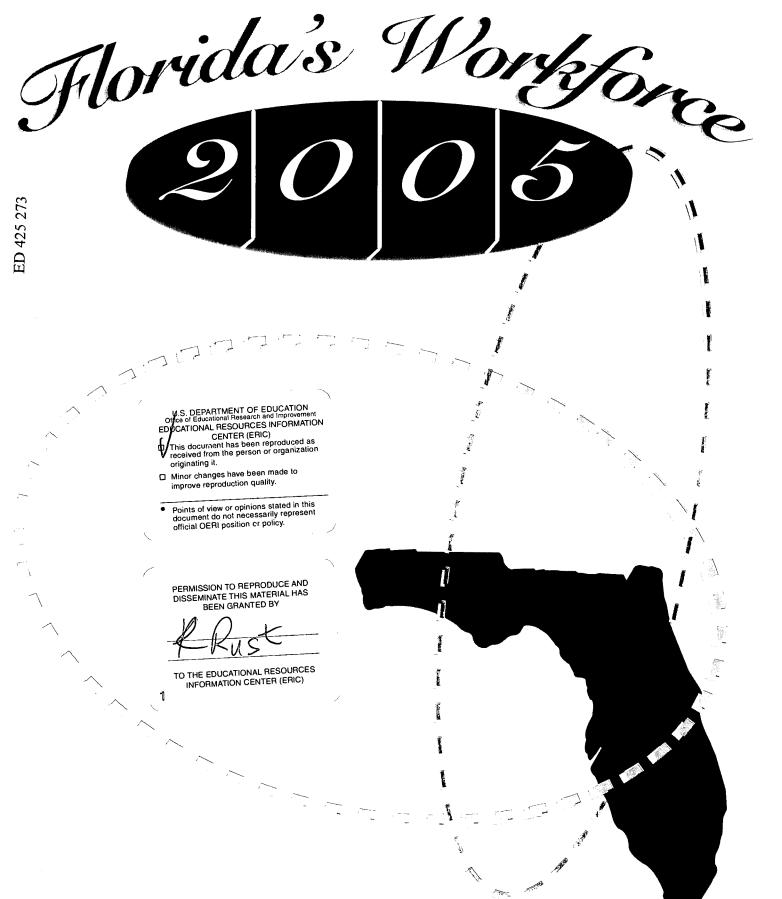
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ABSTRACT

This report analyzes projected changes in population, labor force, and employment by industry and occupation for Florida between 1995 and 2005. More than 50 charts and graphs provide statistics on the following: Florida's population, labor force 1975-2005; employment 1975-2005; industry employment 1995-2005; occupational employment (general); occupational employment (specific); and education and earnings. An appendix and technical notes are included. Some of the conclusions are as follows: (1) Florida is one of the fastest-growing states in the nation, with the state's population projected to reach 16.8 million by the year 2005, but the growth rate is expected to slow during the 1995-2005 period; (2) the state's labor force will continue to grow at a rate approximately twice that of the national average, although the rate of growth from 1995 to 2005 is expected to be slower than the previous 2 decades; (3) employment growth will be fastest in the service and construction industries; (4) health services and business are expected to be the top two job creators; and (5) many of the higher-paying occupations with high growth rates will require 5 or more years of college, although many occupations with large numerical job gains will require only high-school level education and pay substantially less. (KC)





Florida Department of Labor and Employment Security
Division of Jobs and Benefits
Bureau of Labor Market and Performance Information
Workforce Development Information Coordinating Committee

Additional information on topics covered in this publication may be obtained from:

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Overview

This report presents an analysis of projected changes in population, labor force, and employment by industry and occupation for Florida between 1995 and 2005.

Florida continues to be one of the fastest-growing states in the nation. The state's population is projected to reach 16.8 million by the year 2005. Despite a relatively high growth rate in the 1980s, Florida's population growth rate is expected to slow over the 1995 to 2005 period. This slowdown in the growth rate is mainly due to fewer people migrating to Florida combined with a relatively low overall birth rate and relatively high mortality rate.

As Florida's population continues to increase, its structure will shift toward fewer children and youth with a growing proportion of middle-aged and older persons. Florida's population distribution by gender will remain relatively constant.

Florida's labor force will continue to grow at a rate approximately twice that of the national average and is expected to reach approximately 8.6 million by the year 2005. However, its growth rate between the years 1995 and 2005 is expected to be slower than that of the previous two decades—1975 to 1995. The slower growth rate is expected since large segments of the female and minority population have already joined the labor force.

Florida's labor force participation rate is expected to rise to 65.6 percent by 2005, up from 62.0 percent in 1995. Increased participation is due to improved job opportunities available to both women and ethnic minorities. In addition, Florida's recently enacted welfare-to-work law is expected to provide additional incentives for individuals to enter the labor force.

The state's employment is projected to grow nearly twice as fast as that of the nation, increasing to over 8 million jobs by the year 2005. The primary growth in employment is expected to be in the service-producing industries (including self-employed), accounting for more than 9 of every 10 jobs created in Florida between 1995 and 2005. Employment in the service-producing sector will be led by the trade and services industries, which will represent 76.5 percent of growth in service-producing employment. The expected rise in the demand for services, and consequently for service-producing employment, is due mainly to an increase in the number of two-income families with more disposable income to spend.

Real personal income has grown an average of 2.6 percent annually for the 1990-1995 period. It is projected to increase to an annual average of 4.2 percent over the 1995-2005 period. Real per capita income, a measure of the average standard of living, is also expected to increase by an average of 2.0 percent annually over the forecast horizon, 1995 through 2005. These expected increases coupled with Florida's increased population base will drive up the demand for goods and services. Ultimately, these economic factors will result in increased demand for labor particularly in the service-producing and the housing construction industries.



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Health services and business services are expected to be the top two job creators in Florida's services industry, accounting for more than half of the new jobs in the industry. The expansion of employment in, health services is due to increasing health awareness, an aging population, widespread use of health insurance, and improvements in medical technology.

Employment growth among the goods-producing industries is expected to be relatively slow, ranging from a loss of 34.3 percent in metal mining to a gain of 31.5 percent in agricultural services. Several goods-producing industries will increase output through technological advancement, thereby limiting employment growth.

Florida's fastest-growing occupational division is expected to be the service division, including, among others, waiters and waitresses, food preparation workers, guards, corrections officers, home health aides, and child care workers. The professional group is projected to be the second fastest-growing occupational division and is expected to create the largest number of new jobs. This division includes occupations such as systems analysts, computer engineers, and physical therapists. Florida's largest occupational cluster in 1995 was administrative support occupations including clerical with approximately 1.2 million jobs.

Health occupations, expanding at a rate of 33.0 percent over the forcast horizon, will be Florida's fastest growing cluster. Following closely are the engineering, natural science, mathematics, and computerrelated and education-related occupations. The rapid increase in health occupations is due to the need to care for a growing and aging population with a longer life expectancy.

In terms of numerical growth, three clusters will experience a significant increase in their current levels of employment between 1995 and 2005: food, cleaning, personal and protective services, 289,006 jobs; marketing and sales, 203,122 jobs; and health, 162,661 jobs. Other clusters in which employment growth is expected to be strong are administrative support occupations including clerical (Florida's largest occupational cluster in 1995), executive, administrative and managerial occupations, and production occupations. However, many occupations including word processors, central office operators, bank tellers, sewing machine operators, and electrical and electronic assemblers are expected to lose jobs by 2005. The decline will be due mainly to technological innovation, foreign competition, and cutbacks in defense spending.

In general, those occupations expected to have the fastest growth rate pay higher wages than those occupations projected to gain the most jobs. Also, those occupations expected to lose the most employment are mainly low-paying jobs.

Specific occupations where sizeable employment growth is expected are nurses, physicians, teachers, waiters/waitresses, food preparation workers, systems analysts, computer engineers, sales persons,





financial managers, food service managers, accountants and auditors, automotive mechanics, truck drivers, office clerks, adjustment clerks, receptionists, and secretaries. In food services, 135,342 new jobs are projected during the 1995-2005 period. In education alone, more than 25,000 additional elementary and secondary school teachers will be needed.

Many of the higher paying occupations with high growth rates, such as systems analysts, engineers, and physical therapists, will require five or more years of college. However, many occupations with large numerical job gains such as cooks, receptionists, and general office clerks, will require only high school level education and pay substantially less. Occupational demand between 1995 and 2005 will be influenced by both new job creation and employment separations (replacement needs).

As Florida enters the twenty-first century, the demand for workers will be influenced by several factors: new technology, deregulation, global competition, differing consumer lifestyles and purchasing habits, changes in businesses practices, and shifts in population distribution. However, education will be the most important factor influencing workers' employability and earnings. Data indicate that labor market success is tied directly to workers' education and skills. College graduates earned substantially higher salaries than non-college graduates while experiencing subsantially lower unemployment rates.





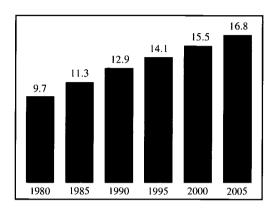
Florida's Population 1980-2005

Florida's population is expected to reach 16.8 million in 2005, an increase of 3.9 million above the state's 1990 level.

Florida is one of the fastest-growing states in the nation. Between 1980 and 1990, Florida's population grew by approximately 33.0 percent or 3.2 million, the largest increase in Florida's history. Despite the rapid increase in the 1980s, Florida's population growth rate has slowed from 3.9 percent in 1980 to 3.1 percent in 1990. This slowdown in the growth rate is mainly due to fewer people migrating to Florida, especially retired persons, combined with a low overall birth rate and high mortality rate. Although this decline in the growth rate is expected to continue, Florida's population is projected to reach 16.8 million in the year 2005, an increase of 3.9 million over its 1990 level of 12.9 million.

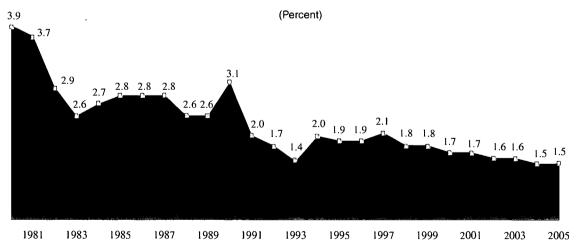
Florida's Population 1980-2005

(Millions)



Source: Florida Demographic Estimating Conference, October 1997.

Florida's Population Growth Rate 1980-2005





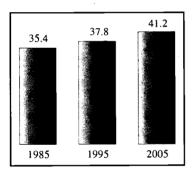


Florida's Population by Age and Gender 1985, 1995, and 2005

By 2005, the median age of Florida's population will be 41.2 years. The fastest-growing age group will be 55-64. Females will account for 51.3 percent of the population while males will make up 48.7 percent.

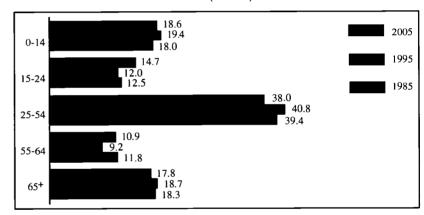
Florida's fastest-growing age group is expected to be 55-64, increasing by 52.5 percent between the years 1995 and 2005. The prime working age group, 25-54, is projected to be one of Florida's slowest-growing age groups, increasing by only 14.5 percent over the forecast horizon. Florida's population will continue to get older as the median age is estimated to increase from 35.4 years in 1985 to 41.2 years in 2005. The growth rate of the elderly, aged 65+, is expected to be weak at 15.8 percent, reducing its population share from 18.7 percent in 1995 to 18.3 percent in 2005. In contrast, young adults aged 15-24 are projected to be Florida's second fastest-growing age group, increasing its share slightly to 12.5 percent by 2005.

Florida's Population Median Age



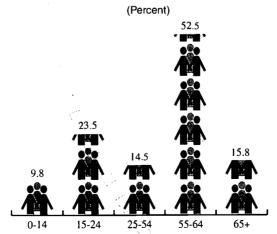
Source: Florida Demographic Estimating Conference, October 1997.

Florida's Population Percentage By Age Group (Percent)



Source: Florida Demographic Estimating Conference, October 1997.

Florida's Population Growth Rate By Age Group 1995-2005



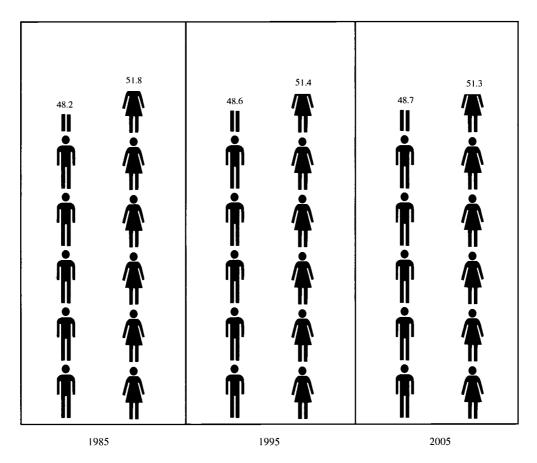






As Florida's population continues to increase, the distribution by gender will remain relatively constant. Females accounted for 51.4 percent of the population in 1995 and are expected to represent 51.3 percent of the population in 2005.

Florida's Population Percent By Gender





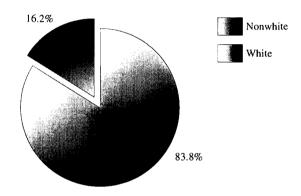


Florida's White and Nonwhite Population 1995-2005

For the 1995-2005 period, Florida's white population is expected to grow faster than its nonwhite population.

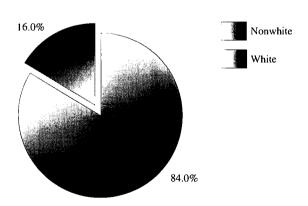
Between 1995 and 2005, it is projected that Florida's white population will grow at a faster rate than the nonwhite population. This is a reversal of a trend from the previous decade. Over the 1995 to 2005 period, the white population is expected to increase from 11,856,392 to 14,070,264, a gain of 2,213,872 persons or 18.7 percent. During the same period, the nonwhite population is estimated to increase from 2,292,925 to 2,686,736, a gain of 393,811 persons or 17.2 percent. The percentage of Florida's white population is expected to increase slightly from 83.8 percent in 1995 to 84.0 percent in 2005.

Distribution of Florida's White/Nonwhite Population in 1995



Source: Florida Demographic Estimating Conference, October 1997.

Distribution of Florida's White/Nonwhite Population in 2005





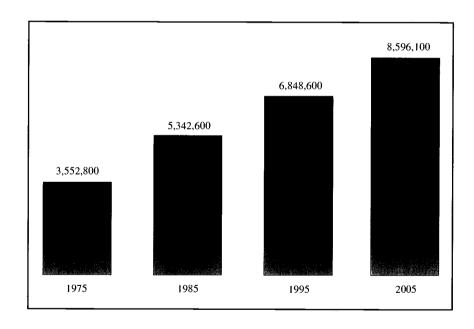


Florida's Labor Force 1975-2005

The labor force is projected to increase steadily between 1995 and 2005; however, the rate of increase is expected to be less than the 1975-1995 period.

In every decade since 1975, Florida's labor force has grown by over 1.5 million participants. The largest increase of approximately 1.8 million individuals was realized in the 1975 to 1985 time period. The rapid expansion between the years 1975 to 1995 was the result of increased labor participation by females, minorities, and persons migrating into the state. In addition, the baby-boom generation began to reach working age during that time, adding a new wave of entrants into the labor force. Additional growth in Florida's labor force is projected from 1995 to the year 2005; however, the rate of increase is expected to be less than the previous two decades.

Florida's Labor Force 1975-2005



Source: Florida Economic Estimating Conference, February 1998.





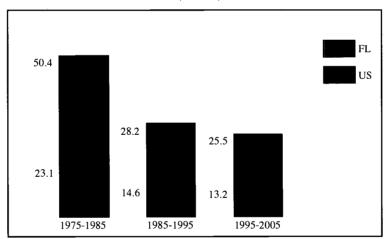
Florida's Labor Force Growth Rates 1975-2005

The labor force is projected to continue to grow faster than that of the nation during the 1995-2005 period; however, the growth rate is expected to be less than the previous two decades.

Florida's labor force has grown and is expected to continue to expand at a rate approximately twice that of the national average. This is primarily due to the large numbers of people who have been migrating into the state and entering the labor market. Much of the labor force growth in both Florida and the nation has resulted from an increase in labor force participation rates by females and minorities. Although, both Florida and the U.S. are expected to experience slower labor force growth between 1995 and 2005, Florida's labor force growth rate is projected to continue to remain higher than the national average.

Labor Force Percentage Growth, U.S. and Florida 1975-2005

(Percent)



Source: Florida Economic Estimating Conference, February 1998.

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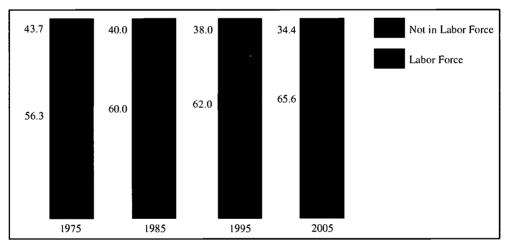
Florida's Labor Force Participation 1975-2005

The labor force participation rate will continue to increase through 2005, partly because of the state's welfare-to-work legislation.

During the 1970s and 1980s, an increasing number of females, blacks, and Hispanics entered the labor force, thereby increasing the percentage of workers in the labor force. Increased participation was due to improved job opportunities available to both women and ethnic minorities. The participation rate will continue to increase through 2005 as Florida's population aged 65 and over are expected to return to the labor force. In addition, Florida's recently enacted welfare-to-work law is expected to provide additional incentives for individuals to enter the labor force.

Florida's Labor Force Participation Rates 1975-2005

(Percent)



Source: Florida Economic Estimating Conference, February 1998.

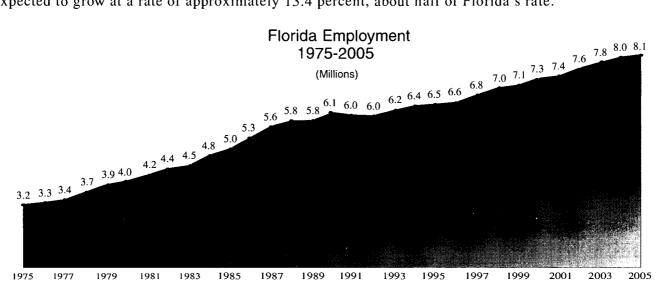




Florida's Employment 1975-2005

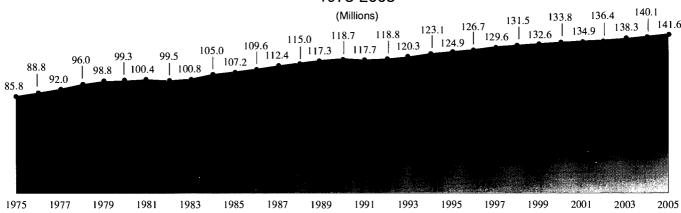
Employment increased approximately 104.0 percent over the 1975-1995 period, but is expected to increase by only 26.0 percent between 1995 and 2005.

Between 1975 and 1995, Florida's employment increased by over 3 million, or approximately 104.0 percent. This substantial increase in employment reflects the rapid growth of Florida's population, which increased by almost 6 million people, or approximately 74.0 percent, during the same period. Florida's employment is projected to increase by almost 26.0 percent from approximately 6.5 million jobs in 1995 to about 8.0 million jobs in the year 2005. Over the same period, national employment is expected to grow at a rate of approximately 13.4 percent, about half of Florida's rate.



Source: Florida Economic Estimating Conference, February 1998.

U.S. Employment 1975-2005



Source: Florida Economic Estimating Conference, February 1998.





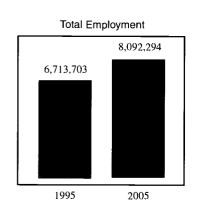
Florida's Industry Employment 1995-2005

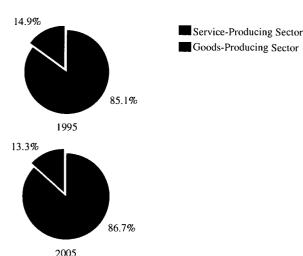
Total employment was more than 6.7 million in 1995 and is expected to reach almost 8.1 million by 2005.

Between 1995 and 2005, Florida's total employment is expected to grow from 6,713,703 to 8,092,294, an increase of 1,378,591 jobs. The primary growth in employment is expected to be in the service-producing industries (including self-employed), which will create 1.3 million jobs or 94.7 percent of the total new jobs between 1995 and 2005. Over this same period, the goods-producing sector is expected to add more than 73,000 jobs of which almost one-quarter will be in manufacturing. The service-producing industries and the goods-producing industries accounted for 85.1 percent and 14.9 percent, respectively, of 1995 total employment. By the year 2005, it is estimated that the service-producing sectors will increase their share of employment by approximately 1.6 percentage points to 86.7 percent. The goods-producing industries share of the 2005 forecasted employment is expected to fall to 13.3 percent. Technological advancement is one of the factors contributing to slow employment growth in the goods-producing sector.

The expected rise in the demand for services, and consequently for service-producing employment, is due to a number of factors, such as Florida's rapid population growth, its ethnic and age composition, changes in consumer lifestyles and purchasing habits, increase in two-income families, and the way businesses are organized and managed. In the service-producing sector, every industry division is expected to grow, with most of the job growth projected in business and health services, and in trade between the 1995 to 2005 period.

Employment in Florida's Service-Producing and Goods-Producing Sectors 1995-2005









Employment in Florida's Service-Producing Sector 1995-2005

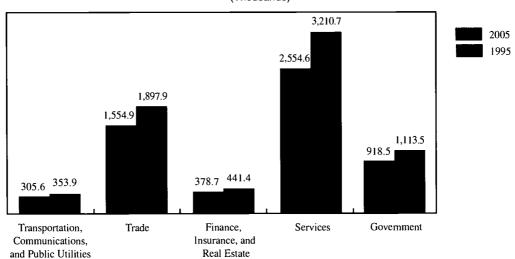
Employment in the service-producing sector increased rapidly over the 1975-1995 period, and will continue to be strong between 1995 and 2005.

Florida's rapidly growing service-producing sector (including self-employed) will add more than 1.3 million jobs to the state's economy between 1995 and 2005. Services and trade industries combined are expected to account for 76.5 percent of the growth in service-producing employment. From 1995 to 2005, the services industry (including self-employed) is projected to expand by almost 26.0 percent and the trade industry by approximately 22.0 percent. An increase in the number of two-income families has provided consumers with additional disposable income to spend and less time to provide services for themselves. These factors lead to rising demands for retail goods and contracted services.

The 3 remaining service-producing industries are expected to grow slower than the entire service-producing sector rate of 23.0 percent: government (21.2 percent); finance, insurance, and real estate (16.6 percent); and transportation, communications, and public utilities (15.8 percent). Technological advancement and increased competition due to deregulation will increase output and dampen employment growth for companies in the transportation, communications, and public utility industries. Current mergers and consolidations in the finance, insurance, and real estate industry will slow employment growth in these industries. Privatization of some government services combined with the increased use of automation will reduce the growth of government employment.

Employment in Florida's Service-Producing Sector 1995-2005

(Thousands)





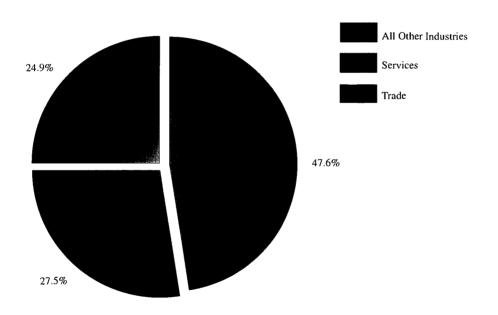


Distribution of Florida's Employment Growth in the Services and Trade Industries 1995-2005

More than 70.0 percent of Florida's employment growth between 1995 and 2005 will be in services and trade.

Total employment growth of 1,378,591 jobs is expected in Florida between 1995 and 2005. Over 70.0 percent of this growth will be in the services industry (656,124 job gains) and in wholesale and retail trade industries (342,940 job gains). Employment growth in all other industries combined (excluding trade and services) is expected to contribute 27.5 percent or 379,527 jobs to the total. The dominance of employment growth by services and trade is linked to a number of factors including Florida's rapid population growth, its ethnic and age composition, changes in consumer lifestyles and purchasing habits, increases in two-income families, advances in science and technology, and the way businesses are organized and managed.

Percentage of Total Employment Growth in the Services and Trade Industries 1995-2005









Employment in Florida's Goods-Producing Sector 1995-2005

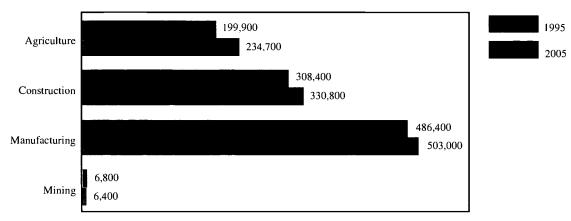
Employment growth in the goods-producing sector is projected to be slow between 1995 and 2005, partly due to investment in more advanced and efficient technology.

Between 1995 and 2005, only 5.3 percent (73,401) of approximately 1.4 million total new jobs in Florida are projected to be in the goods-producing sector. Manufacturing is expected to account for 22.6 percent of the employment growth in the goods-producing sector but less than 1.5 percent of the total new jobs created statewide. Agriculture and construction are estimated to generate 47.5 percent and 30.6 percent, respectively, of the increase in total goods-producing jobs. Nearly all new agricultural jobs are expected to come from agricultural services which will add 43,052 new jobs between 1995 and 2005. Mining employment is projected to decline by almost 7.0 percent (from 6,831 to 6,371 jobs) over the period.

Overall, employment growth among Florida's goods-producing industries is expected to be slow, ranging from -34.3 percent for metal mining to 31.5 percent for agricultural services. Job growth in construction will continue to soften from its boom periods of the 1970s and the 1980s as the industry responds to slower population growth, inventory absorption, and the impact of growth management regulations. Weaker building activity will also affect the construction-related sectors of mining and manufacturing.

Manufacturing will be confronted with the uncertainties of government spending for defense and aerospace, thereby leading many employers to expand cautiously. Increased investment in technologically advanced equipment is expected to result in productivity gains and slower growth of manufacturing jobs.

Employment in Florida's Goods-Producing Sector 1995-2005





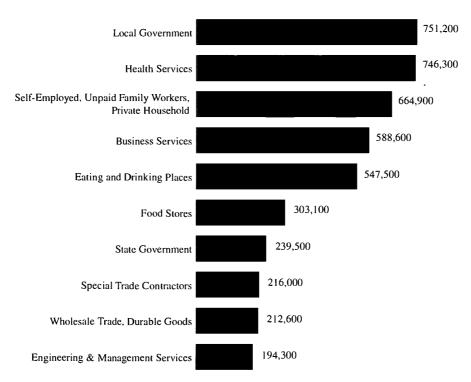


Florida's Top Ten Industries in 2005

More than 50.0 percent of Florida's total employment by 2005 will be concentrated in 10 industry groups.

By 2005, total employment in Florida is projected to reach 8,092,294 jobs. Florida's top 5 industries are expected to account for 3,298,435 jobs or almost 41.0 percent of total employment. More than one of every two jobs will be in the top ten industry groups. Between 1995 and 2005, local government, health services, eating and drinking places, food stores, state government, and engineering and management services are expected to grow faster than the average growth rate for all industries

Florida's Top Ten Industry Groups in 2005









Florida's Employment Growth in the Services Industry 1995-2005

Employment in the services industry between 1995 and 2005 will increase by more than 570,000 jobs, primarily in health and business services.

Total employment in Florida's services industry is projected to increase by 571,672 jobs or approximately 29.0 percent between 1995-2005. Social services and miscellaneous business services with estimated increases of 52.1 percent and 45.9 percent, respectively, are expected to be the fastest-growing sectors in the services industry. Health and business services are expected to be the top 2 job creators in the services industry, growing by 38.6 percent and 18.9 percent (193,578 and 93,741 new jobs), respectively.

The expansion of employment in health services is due to increasing health awareness, an aging population, greater access to health insurance, and improvements in medical technology. Increasing demand for temporary help, development of new computer and data processing applications, and the tendency to contract out services will result in rapid employment growth in business services.

Employment Growth in Florida's Services Industry 1995-2005

(Percent) 52.1 Social Services 45.9 Miscellaneous Business Services 40.4 Museums and Botanical and Zoological Gardens 38.6 Health Services 35.7 Engineering and Management Services Amusement and Recreation Services Auto Repair Services and Parking 25.2 Motion Pictures **Educational Services** 24.2 Hotels and Other Lodging Places 21.4 Personal Services Membership Organizations Business Services Miscellaneous Repair Services Legal Services



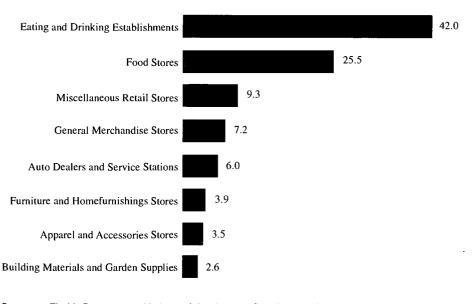


Florida's Employment Growth in the Retail Trade Industry 1995-2005

Growth in retail trade will add more than 290,000 new jobs to the state's economy between 1995 and 2005. Most of these jobs are expected to be in eating and drinking establishments and food stores.

Retail trade is estimated to account for 290,074 new jobs or more than four-fifths of all new jobs created in the wholesale and retail trade sectors from 1995 to 2005. Within retail trade, most of the new jobs are expected to be in eating and drinking establishments and food stores. Combined, these two types of retailers are projected to account for nearly 68.0 percent of the total employment growth in the retail sector. Some retail stores such as general merchandise stores, auto dealers and service stations, apparel and accessories stores, building materials and garden supplies shops, and miscellaneous retail stores, are expected to have slower than average job growth for total employment.

Florida's Retail Trade Employment Growth Percent of Total Retail Trade 1995-2005



Source: Florida Department of Labor and Employment Security, Division of Jobs and Benefits, Bureau of Labor Market and Performance Information.

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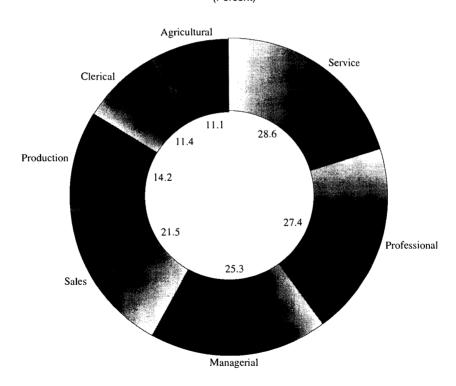
Florida's Employment Growth by Occupational Division 1995-2005

The fastest-growing jobs in Florida between 1995 and 2005 will be in the service division because of the strong demand for waiters, waitresses, food preparation workers, guards, home health aides, and child care workers.

Among Florida's major occupational divisions, the service division is expected to be the fastest-growing at 28.6 percent, adding over 350,000 new jobs between 1995 and 2005. The strong demand for waiters and waitresses, food preparation workers, guards and corrections officers, home health aides, and child care workers, will significantly influence the service division's growth. The professional division is projected to grow at the second-fastest pace and is expected to create the largest number of new jobs (354,093). Growth in the managerial and sales divisions is also expected to be strong at 25.3 percent (114,640 jobs) and 21.5 percent (203,122 jobs), respectively.

Employment Growth by Occupational Division 1995-2005

(Percent)



Source: Florida Department of Labor and Employment Security, Division of Jobs and Benefits, Bureau of Labor Market and Performance Information.



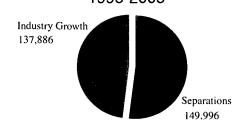


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Average Annual Openings by Occupational Division 1995-2005

Job openings will average nearly 300,000 annually over the 1995-2005 period with service and professional occupations representing 44.0 percent of the gains.

Florida's Annual Average Job Openings for All Occupational Divisions 1995-2005



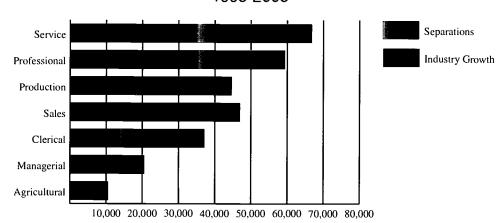
Source: Florida Department of Labor and Employment Security, Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

Between 1995 and 2005, Florida will create on average almost 300,000 job openings per year. Slightly less jobs will be generated annually by *industry growth* (137,886) as by *separations* (149,996). Job openings result when positions are created either by industry growth (*expansion*) or when existing positions are vacated (*separations*) because of deaths, retirements, or other permanent departures from the labor force by incumbent employees.

Service and professional occupations, two groups on the opposite ends of the education and earnings spectrum, are expected to provide 44.0 percent of the annual job openings between 1995 and 2005. Agricultural occupations will depend more on labor force separations for its annual openings than any other occupational group and will have the fewest average annual openings (10,828 jobs).

Florida's Annual Average Job Openings by Occupational Division 1995-2005







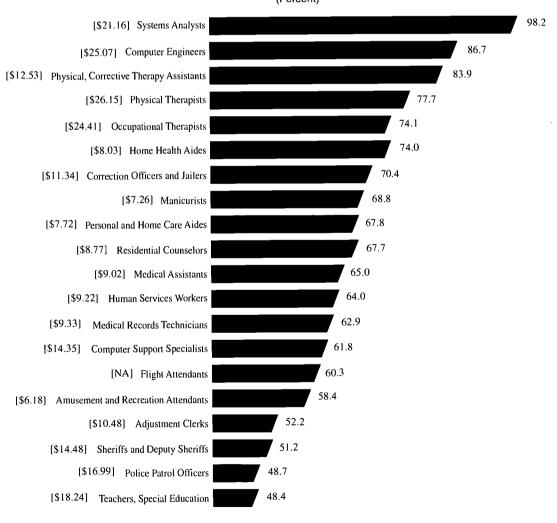
Florida's Fastest-Growing Occupations 1995-2005

Computer-related employment will have the fastest growth rate between 1995 and 2005, followed by jobs in health and social services.

Jobs in the computer-related fields such as systems analysts and computer engineers are projected to grow faster than all other occupations between the 1995-2005 period. However, almost half of the 20 fastest growing occupations are associated with health or social services. Based on the 1996 wage data, most of the fastest-growing occupations pay moderate-to-high average hourly wages.

Florida's Top 20 Fastest Growing Occupations 1995-2005

(Percent)



[NA] = Not Available

Florida Department of Labor and Employment Security, Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.



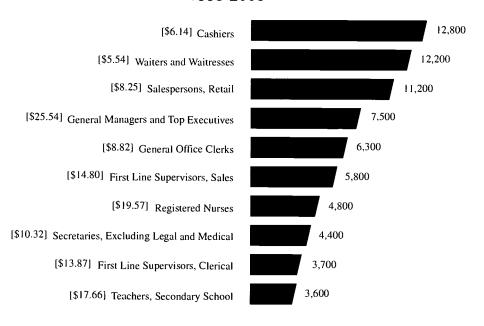


Occupations in Florida with the Largest Average Annual Openings 1995-2005

Many occupations with the greatest average annual openings over the 1995-2005 period will be low-paying jobs requiring minimal training, and employing part-time and young workers.

During the 1995 to 2005 period, many occupations with the largest number of average annual openings will generally be low-paying jobs which require limited training, and employ a high percentage of young and part-time workers. Jobs in the top three occupations with the largest average annual openings are low-paying jobs with average hourly wages ranging from \$5.54 to \$8.25. Openings include job formation due to both growth and separations. From 1995 through 2005, most of the top ten occupations with the greatest number of annual openings are due to separations, rather than growth. The occupations listed below that are projected to experience more job growth than job separations over the forecast horizon are general managers, registered nurses, sales supervisors, and clerical supervisors.

Occupations in Florida with the Largest Average Annual Openings 1995-2005







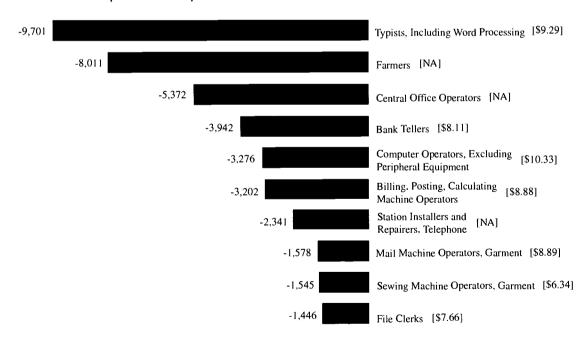


Declining Employment in Florida 1995-2005

By 2005, 50 occupations with at least 275 jobs in 1995 will lose employment mainly due to technological innovation. Most of the job losses are expected to be for traditional office workers.

In 1995, there were 50 occupations in Florida with employment of at least 275 that are projected to lose employment over the forecast horizon ranging from a loss of 83 jobs to 9,701 jobs. During the entire 1995 to 2005 period, approximately 55,000 jobs are projected to disappear. A large part of the job loss will be for traditional office workers such as typists including word processors, central office operators, bank tellers, file clerks, and billing and posting machine operators. The ten occupations expecting to lose the most jobs pay low-to-moderate wages ranging from an average hourly wage of \$6.34 to \$10.33. The expected decline is mainly the result of automation and technology. However, not all job losses will be confined to office workers. Declining employment is also expected among sewing machine operators, telephone repairers, and electrical and electronic assemblers by the year 2005. Most of the decline in employment will result from technological innovation, foreign competition, and cutbacks in defense spending.

Top Ten Occupations with Job Loss between 1995-2005



[NA] = Not Available



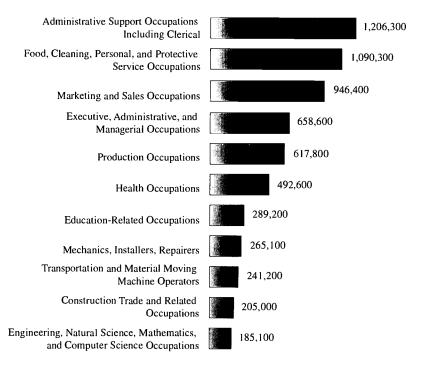


Florida's Occupational Clusters by Employment Size 1995

The administrative support group was Florida's largest occupational cluster in 1995 with employment of approximately 1.2 million.

Florida's largest occupational cluster in 1995 was administrative support occupations including clerical with approximately 1.2 millions jobs. Only one other cluster had more than 1 million jobs — food, cleaning, personal, and protective service occupations.

Employment by Occupational Cluster, 1995







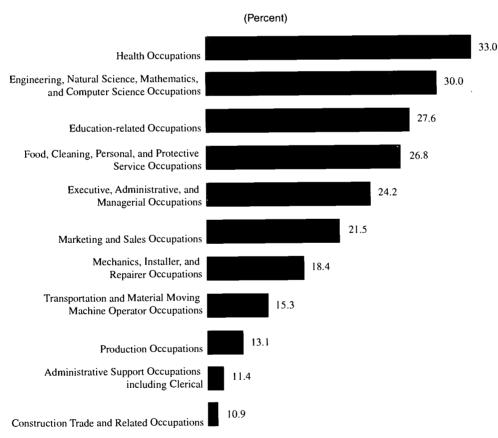


Florida's Fastest Growing Occupational Clusters 1995-2005

Health occupations will be the fastest-growing cluster for the 1995-2005 period, followed closely by the engineering, natural science, mathematics, and computer science cluster.

Florida's fastest-growing cluster will be health occupations, which are expected to increase by 33.0 percent for the 1995-2005 period. Following closely are engineering, natural science, mathematics, and computer-related and education-related occupations. The largest cluster, administrative support occupations including clerical, is projected to increase by 11.4 percent. No occupational cluster is projected to decline over the forecast period.

Employment Growth Rate by Occupational Cluster 1995-2005







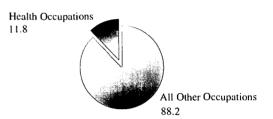
Health Occupational Cluster in Florida 1995-2005

Health occupations will increase by 162,700 jobs between 1995 and 2005, largely because of an aging population with increased life expectancy. Physicians, nurses, and home health aides will account for more than half of the job growth in health occupations.

Employment in health occupations in Florida will increase by 162,700 jobs over the 1995-2005 period due to the need to care for a growing and aging population with a longer life expectancy. Health occupations are projected to account for 11.8 percent of total employment growth although these occupations accounted for only 7.3 percent of total employment in 1995.

Projected Share of Employment Growth for Health Occupations 1995-2005

(Percent)



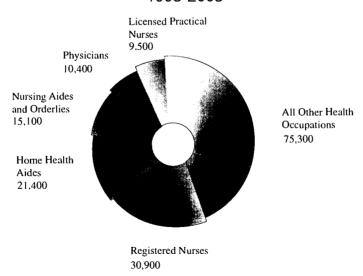
Source:

Florida Department of Labor and Employment Security, Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

In 1995, five health occupations accounted for about 60.6 percent of all health-related employment. These same health occupations are expected to account for 53.7 percent of the job growth between 1995-2005.

Health-Occupational Employment Growth for Selected Occupations 1995-2005



Source:

Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

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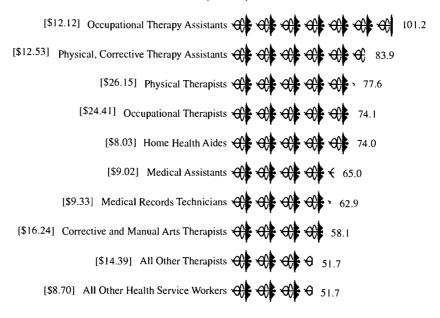




Health occupations will grow by 33.0 percent over the forecast horizon, more than one and one-half times the growth rate of all occupations. The top ten fastest growing health occupations pay moderate-to-high average hourly wages. Three professional occupations are among the ten fastest growing health occupations: physical therapist, occupational therapist, and corrective and manual arts therapist. Growth rates are expected to be below average only in a few health occupations. The only health occupation projected to lose jobs over the next ten years is EKG technician.

Projected Employment Growth Rate for Top Ten Fastest Growing Health Occupations 1995-2005

(Percent)



Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

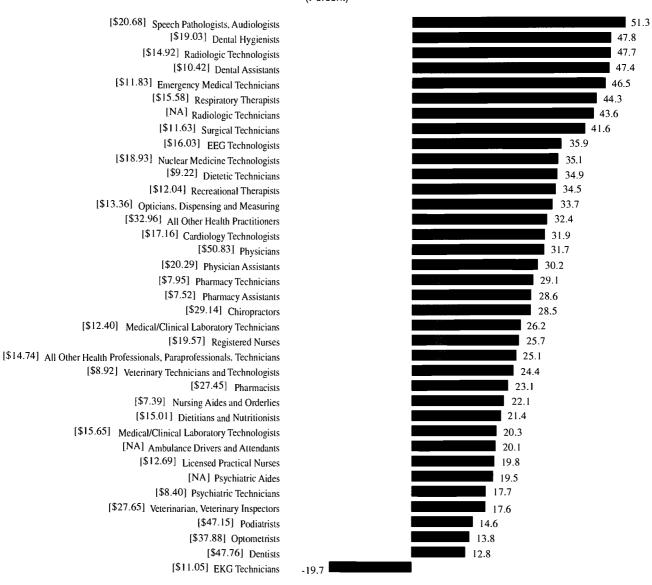
Bureau of Labor Market and Performance Information.





Projected Employment Growth Rate for Selected Health Occupations 1995-2005

(Percent)



[NA] = Not Available







Engineering, Natural Science, Mathematics, and Computer Science Occupational Cluster in Florida 1995-2005

Employment in computer-related fields will account for more than 60.0 percent of the new jobs created in engineering, natural science, mathematics, and computer science occupations in Florida between 1995 and 2005.

Engineers, scientists, and workers in related occupations numbered 185,100 in 1995, representing 2.8 percent of Florida's total employment. This occupational cluster is expected to account for 4.0 percent of Florida's total employment growth over the 1995-2005 period.

Projected Share of Employment Growth for Engineering, Science, and Related Occupations 1995-2005

(Percent)

Engineering, Natural Science, Mathematics, and Computer Science Occupations 4.0 All Other Occupations

Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

Among engineering, natural science, mathematics and computer science occupations, those in the computer field (including computer engineers) will account for over 60.0 percent of the new jobs created in this cluster.

> Projected Share of Growth in Cluster for Engineering. Natural Science, and Related Occupations 1995-2005

> > (Percent)

Natural Scientists, Mathematicians, and Related Workers

Engineers - Excluding Computer Engineers 19.4



Computer Engineers and Computer Related Occupations

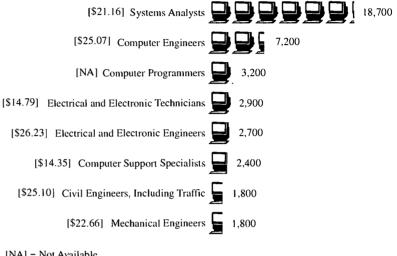






Systems analysts, computer engineers, and computer programmers are projected to create the most new jobs in this cluster over the 1995-2005 period. Healthy growth is also expected to be significant for electrical and electronic engineers and technicians, computer support specialists, civil and mechanical Most of these engineers. occupations are high-paying occupations.

Top Eight Occupations in Cluster with Largest Number of New Jobs 1995-2005



[NA] = Not Available

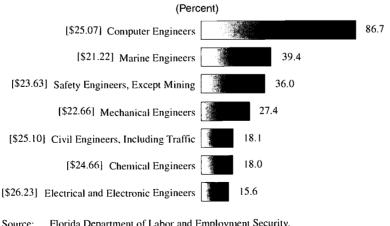
Florida Department of Labor and Employment Security, Source:

Division of Jobs and Benefits.

Bureau of Labor Market and Performance Information.

Consistent with their large numerical growth, computer engineers and other engineer occupations are expected to have the fastest growth rate in this cluster over the forecast horizon. These occupations are high-paying occupations. Mining and safety engineers are the only occupations in this cluster projected to lose jobs over this period.

Fastest-Growing Engineering Occupations 1995-2005



Florida Department of Labor and Employment Security, Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.





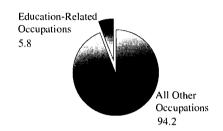
Education-Related Occupational Cluster in Florida 1995-2005

Secondary school teachers will make up the greatest number of education-related jobs over the 1995-2005 period while special education teachers will be the fastest-growing education-related occupation.

Education-related occupations are expected to increase by almost 80,000 jobs and account for 5.8 percent of employment growth during the 1995-2005 period. These occupations accounted for over 4.0 percent of total employment in 1995.

Projected Share of Employment Growth for Education-Related Occupations 1995-2005

(Percent)



Source:

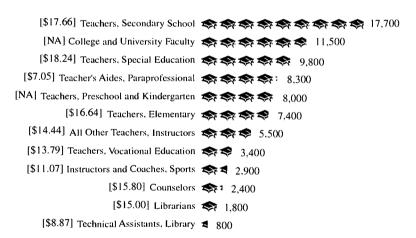
Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

Employment growth of over 60,000 jobs is expected in teaching occupations between 1995 and 2005. The secondary school teacher occupation is projected to add the greatest number of jobs.

New Jobs in Education-Related Occupations 1995-2005



[NA] = Not Available

ource: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

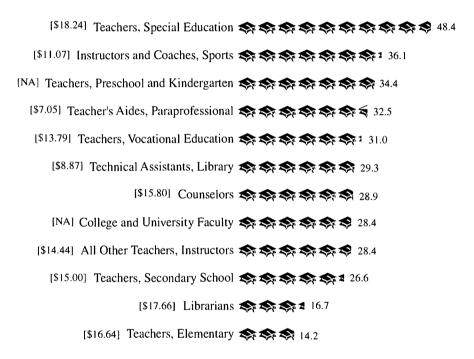




Employment for special education teachers is projected to be the fastest-growing occupation in this cluster, expanding at a rate of 48.4 percent over the 1995-2005 period.

Job Growth for Education-Related Occupations 1995-2005

(Percent)



[NA] = Not Available

Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,





Food, Cleaning, Personal, and Protective Service Occupational Cluster in Florida 1995-2005

Employment in the food, cleaning, personal, and protective service occupations is expected to increase by almost 290,000 jobs between 1995 and 2005.

More than 1 million workers were employed in food, cleaning, personal, and protective service occupations in 1995, accounting for 16.1 percent of total employment. Almost 50.0 percent were employed in the food and beverage occupations.

Jobs in the Service Occupations, 1995

(Percent)

First Line Supervisors, Service

5.2



Service ns illding Service

Food and Beverage Service Occupations 49.3

Cleaning and Building Service Occupations, Excluding Private 17.9

Source:

14.9

Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

Employment in food, cleaning, personal and protective service occupations is projected to increase by almost 290,000 jobs, accounting for 21.0 percent of total employment growth for all occupations between 1995 and 2005.

Projected Share of Employment Growth for Selected Service Occupations 1995-2005

(Percent)

Food, Cleaning, Personal, and Protective Service Occupations

21.0



Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,



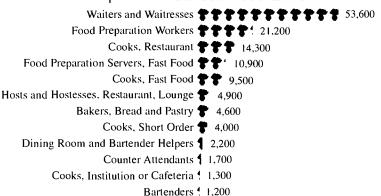


Food and Beverage Service Occupations

Food and beverage service occupations are estimated to increase by 25.4 percent over the 1995-2005 period. This occupational group, which is linked to tourism, is the third fastest-growing occupational group in this cluster, reflecting the fast growth rate for the eating and drinking places industry where many of these workers are employed. During the 1995-2005 period, food and beverage service occupations will add over 135,000 new jobs, the most in this cluster.

Most of the growth in this group, approximately 81.0 percent, will be in 5 occupations: waiters and waitresses, food preparation workers, restaurant cooks, fast food preparation and service workers, and fast food cooks. These same occupations accounted for the majority of food service jobs in 1995.

Projected New Jobs for Selected Food Service Occupations between 1995-2005



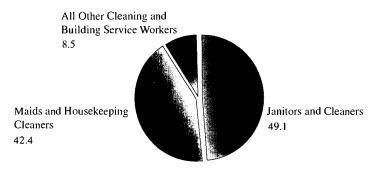
Source: Florida Department of Labor and Employment Security,
Division of Jobs and Benefits,
Bureau of Labor Market Performance Information.

Cleaning and Building Service Occupations

Cleaning and building service occupations are projected to increase by 16.4 percent, making it the slowest growing service occupation in this cluster. Most of the expected growth of 31,615 jobs in this group will be in the occupations of janitors and cleaners and maids and housekeeping cleaners. These same two occupations accounted for most of the workers in 1995.

Projected Share of Cleaning-Occupation Employment Growth for Janitors and Cleaners, Maids and Housekeeping Cleaners 1995-2005

(Percent)



Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,



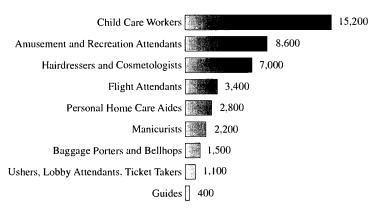




Personal Service Occupations

Personal service occupations are projected to grow by 32.0 percent and will be the second fastest-growing occupational group within the food, cleaning, personal, and protective service occupational cluster by adding 43,867 jobs from 1995 to 2005. This group includes manicurists and personal home care aides, which are the top two fastest-growing personal service occupations, respectively. However, most of the projected growth will be in the child-care worker occupation, adding 15,248 jobs. Cosmetologists and related workers and amusement and recreation attendants are also projected to add large numbers of jobs.

Projected New Jobs for Selected Personal Service Occupations 1995-2005



Source: Florida Department of Labor and Employment Security,

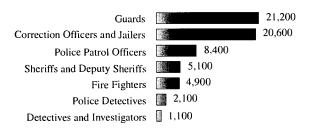
Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

Protective Service Occupations

Protective service occupations are projected to expand the fastest within the food, cleaning, personal, and protective service occupational cluster. This occupational group is expected to grow at a rate of 41.2 percent, adding 66,234 jobs between 1995 and 2005. Guards, the largest occupation in this group, is projected to increase by 33.4 percent, adding 21,178 jobs. Correction officers and jailers will be the fastest-growing occupation in the group, increasing by 70.4 percent and adding 20,619 jobs. Police patrol officers and police detectives will add 10,502 jobs.

Projected New Jobs for Selected Protective Service Occupations 1995-2005



Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,





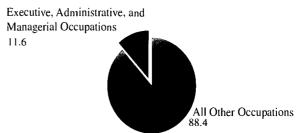
Executive, Administrative, and Managerial Occupational Cluster in Florida 1995-2005

Florida's executive, administrative, and managerial occupations are projected to grow 24.2 percent between 1995 and 2005, faster than all state occupations.

Executive, administrative, and managerial occupations will account for 11.6 percent of Florida's total growth in employment over the 1995-2005 period, almost 2.0 percent larger than its 9.8 percent share of 1995 total employment.

Projected Share of Employment Growth for Executive. Administrative, and Managerial Occupations 1995-2005

(Percent)

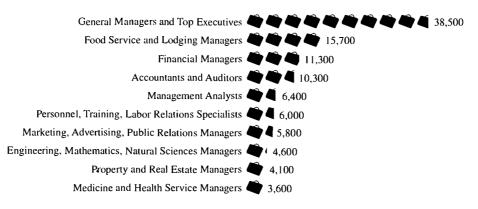


Florida Department of Labor and Employment Security, Division of Jobs and Benefits. Bureau of Labor Market and Performance Information.

The rate of increase in managerial occupations over the 1995-2005 period is expected to be greater than the growth rate for all occupations. The projected growth rate for executive, administrative, and managerial occupational clusters is 24.2 percent, almost 4.0 percent higher than the growth rate of all occupations over the forecast period.

General managers and top executives will add more jobs than any other managerial occupation, accounting for over one-fourth of the projected increase of 159,400 jobs.

Projected Employment Growth for Selected Executive. Administrative, and Managerial Occupations 1995-2005



Source:

Florida Department of Labor and Employment Security, Division of Jobs and Benefits,

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Marketing and Sales Occupational Cluster in Florida 1995-2005

Marketing and sales jobs will grow at an average rate of 21.0 percent over the 1995-2005 period. The greatest job growth will be for cashiers, retail salespersons, and marketing and sales worker supervisors.

Florida's marketing and sales cluster is projected to grow by approximately 21.0 percent, the same as the average growth rate for all occupations over the 1995-2005 period. In 1995, marketing and sales workers accounted for 14.1 percent of total employment but are projected to account for almost 15.0 percent of total employment growth over the forecast period.

Projected Share of Employment Growth for Marketing and Sales Occupations 1995-2005

(Percent)



Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

Of the 203,100 new marketing and sales jobs forecasted over the 1995-2005 period, 60.8 percent are expected to be in three occupations — cashiers, retail salespersons, and marketing and sales worker supervisors.

Projected Employment Change for Selected Sales and Marketing Occupations 1995-2005



Source: Florida Department of Labor and Employment Security, Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

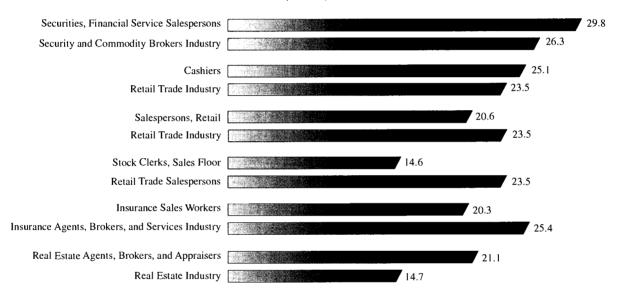


Florida's Workforce

Occupational employment growth in Florida will be a direct result of the employment growth generated by each industry. The following diagram shows that, over the forecast period, the rate-of-growth for most sales occupations is closely related to the rate of growth of the industry in which the occupation is concentrated.

Projected Employment Growth for Selected Sales Occupations and the Industry in Which Each is Concentrated 1995-2005

(Percent)



Florida Department of Labor and Employment Security, Division of Jobs and Benefits, Source: Bureau of Labor Market and Performance Information.





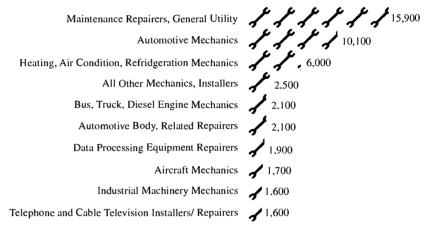
Mechanic, Installer, and Repairer Occupational Cluster in Florida 1995-2005

Between 1995 and 2005, some jobs in the mechanic, installer, and repairer occupational cluster will increase (e.g., data processing equipment repairers), but other jobs are projected to decline (e.g., telephones equipment repairers and installers).

Florida's 265.052 mechanics. installers, and repairers accounted for 3.9 percent of total employment in 1995. Over the 1995-2005 period, this cluster is projected by 18.4 percent, approximately 2.0 percent slower than the average growth rate for all occupations over the period. Data processing equipment repairers with a projected growth rate of 43.7 percent over the forecast period are expected to be the fastest-growing occupation in this cluster. General utility maintenance repairers, automotive mechanics, and heating, conditioning, and refrigeration mechanics are expected to account for over 30,000 new jobs or approximately 65.0 percent of the job-growth in this cluster.

Jobs in many telephone-related occupations in this cluster are expected to decline over the forecast period. Selected occupations within this cluster are projected to decline because of technological advancement which reduces the demand for labor.

Job Gains for Top Ten Mechanic, Installer, and Repairer Occupations 1995-2005



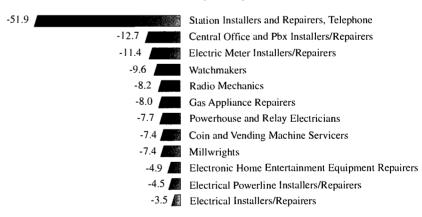
Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

Negative Growth Rates in Mechanic, Installer, and Repairer Occupations 1995-2005

(Percent)



Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,







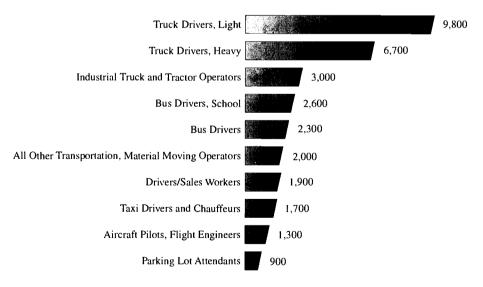
Transportation and Material Moving Machine Operator Occupational Cluster in Florida 1995-2005

Truck and bus drivers represented almost 60.0 percent of Florida's transportation-related jobs in 1995. By 2005, truck-driving occupations will add almost 20,000 jobs. Aircraft pilot and flight engineering jobs will increase by approximately 30.0 percent.

More than 240,000 workers, or almost 4.0 percent of all workers, were employed in the transportation and material moving machine operator occupational cluster in 1995. Among these occupations, truck drivers were by far the most numerous in 1995, accounting for nearly 140,000 workers and almost 60.0 percent of the workers in this cluster. The truck driving occupation is also expected to dominate growth in this cluster in terms of the number of jobs by adding almost 20,000 over the 1995-2005 period.

However, the fastest growth rate is expected in the subway and streetcar operator and gas and compressor operator occupations with growth rates of 57.4 percent and 50.0 percent, respectively. Seven occupations in this cluster are projected to experience a negative growth rate resulting in the decline of the absolute number of jobs over the forcast period: well pump operators -20.0 percent; oil pumpers, except well head -12.5 percent; loading machine operators, underground mining -9.1 percent; tank car and truck loaders -8.3 percent; rail yard engineers and dinkey operators -7.6 percent; pump operators -4.3 percent; and hoist and winch operators -1.9 percent. The aircraft pilot/flight engineer occupation is expected to grow at approximately 30.0 percent, faster than the cluster growth rate of 15.3 percent.

Job Gains for the Top Ten Transportation and Material Moving Machine Operator Occupations 1995-2005



Source: Florida Department of Labor and Employment Security, Division of Jobs and Benefits, Bureau of Labor Market and Performance Information.

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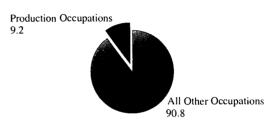
Production Occupational Cluster in Florida 1995-2005

Between 1995 and 2005, some jobs in Florida's production occupational cluster such as letterpress operators and typesetters, coil winders, paste-up workers, tailors, and electronic assemblers are projected to decline.

In 1995, production occupations accounted for almost 618,000 jobs or 9.2 percent of all jobs in Florida.

Share of Employment for Production Occupations 1995

(Percent)



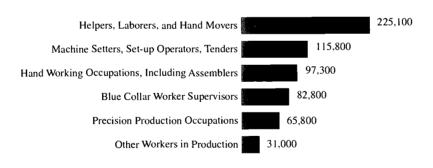
Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

Production workers are classified by skills into six groups including precision production workers; machine setters, set-up operators, and tenders; hand workers, including assemblers; helpers, laborers, and hand movers; blue-collar worker supervisors; and others. In 1995, helpers, laborers, and hand movers accounted for the largest share of the jobs in this cluster with 36.4 percent, followed by machine setters, set-up operators, and tenders with 18.7 percent.

Employment Distribution of Production Workers 1995



Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,



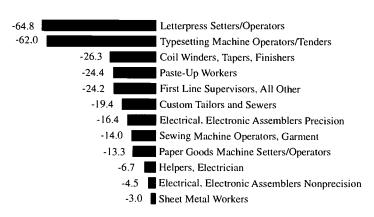


For the 1995-2005 period, many occupations included in the machine setters, set-up operators, and tenders group are projected to lose jobs. However, growth in this group will still be positive, but its share of employment in the production cluster is projected to fall from almost 19.0 percent in 1995 to less than 18.0 percent by 2005.

Employment growth rates among the many production occupations vary significantly, ranging from a high of 75.6 percent to a low of -64.8 percent over the 1995-2005 period. Occupational growth rates are influenced by the specific manufacturing industry where the employment occurs. For example, one of the largest occupations—sewing machine operators, garments—is projected to decline by approximately 14.0 percent, a loss of 1,545 jobs over the 1995-2005 period. This loss of jobs can be attributed to productivity gains in the garment industry and to foreign production, such as in Asia and Mexico. Other occupations will experience fairly large negative growth rates. However, the number of jobs lost will not be as significant as in the previous decade since their 1995 employment base was smaller.

Projected Decline in Employment for Selected Production Occupations 1995-2005

(Percent)



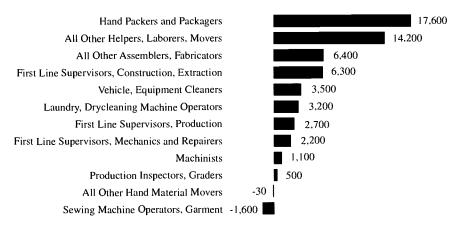
Source: Florida Department of Labor and Employment Security,
Division of Jobs and Benefits,





Hand packers and packagers occupation is expected to gain the most new jobs in this cluster, accounting for almost 18,000 new jobs over the forecast horizon.

Projected Change in Employment for Production Occupations with at Least 10,000 Workers 1995-2005



Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

Other production occupations will also be affected by technological changes. For example, jobs for electronic pagination system operators are expected to increase by 75.6 percent, gaining 1,209 jobs over the 1995-2005 period. This increase is due to the use of technology in the printing operations that will also result in a decline in employment for paste-up workers.

Projected Change in Employment for Electronic Pagination Systems Workers and Paste-Up Workers 1995-2005

(Percent)



Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,





Administrative Support Including Clerical Occupational Cluster in Florida 1995-2005

Over the 1995-2005 period, jobs for typists, word processors, central office operators and bank tellers will decline, but employment will increase for general office operators, receptionists, first line supervisors, and secretaries.

Employment in administrative support occupations, including clerical, which accounted for 18.0 percent of all jobs, was 1,206,307 in 1995, more than any other occupational cluster. Although this cluster is expected to reach 1,343,472 jobs in 2005, it is expected to lose its number one ranking to the food, cleaning, personal, and protective service occupational cluster.

Share of Employment for Administrative Support Occupations, Including Clerical 1995

(Percent)

Administrative Support Occupations,
Including Clerical
18.0

All Other Occupations

Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

82.0

This cluster's share of new jobs for all occupations is expected to be only 9.9 percent by the year 2005.

Projected Share of Employment Growth for Administrative Support Occupations, Including Clerical 2005

(Percent)

Administrative Support Occupations, Including Clerical

10.0



Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits.

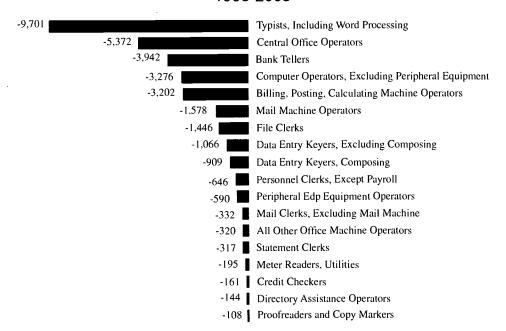
Bureau of Labor Market and Performance Information.



Florida's Workforce 49

Due to technological innovations and changes in business practices, many occupations in the administrative support cluster, including clerical, are projected to experience a decline in jobs over the 1995-2005 period. For example, the demand for typists, including word processors, is projected to fall by almost 10,000 jobs over the forecast horizon. This reflects the growing use of computers which increases productivity and also permits other office workers to do their own word processing. Employment in occupations such as central office operators and bank tellers are expected to decline mainly due to technological development and changes in business practices.

Projected Decline in Employment for Selected Administrative Support Occupations 1995-2005



Source: Florida Department of Labor and Employment Security,

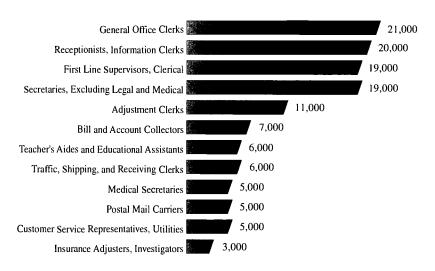
Division of Jobs and Benefits,





The number of jobs in many administrative support occupations is expected to increase. Occupations including receptionists, adjustment clerks, teacher's aides, medical secretaries, bill collectors, and postal mail carriers are projected to experience higher than average (20.5 percent) growth rates. These faster growing occupations typically involve a greater amount of contact with clients and customers.

Projected Increase in Employment for Selected Administrative Support Occupations 1995-2005



Source: Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.





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Construction Trades and Related Occupational Cluster in Florida 1995-2005

Over the 1995-2005 period, more than half of the new construction jobs will be for carpenters, painters, electricians, and roofers.

Employment is expected to grow slowly for most construction trades and related occupations. The slow growth rate of this occupational cluster will be due primarily to the much slower than average growth rate projected for the goods-producing industries, especially construction and mining. The decline in growth will most likely be due to a slowdown in population. This cluster's share of total employment, which was 3.1 percent in 1995, is expected to decline slightly to 2.8 percent in 2005.

Projected Share of Employment Growth for Construction Trades and Related Occupations 2005

(Percent)





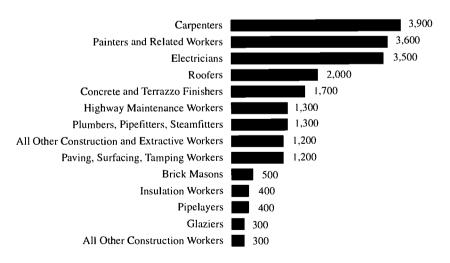
Source:

Florida Department of Labor and Employment Security, Division of Jobs and Benefits,

Bureau of Labor Market and Performance Information.

Job gains in construction trades and related occupations are expected to be concentrated in four occupations: carpenters, painters and related workers, electricians, and roofers. These 4 occupations are projected to account for over 13,000 new jobs or more than 58.0 percent of the new jobs created in this group over the 1995-2005 period.

Projected New Jobs for Selected Construction Trades and Related Workers by Occupation 1995-2005



Source:

Florida Department of Labor and Employment Security,

Division of Jobs and Benefits,





Education, Earnings, and Unemployment Rates, United States 1996

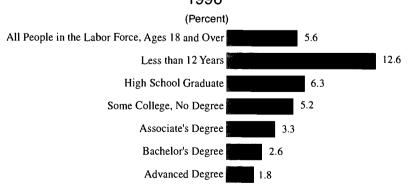
Labor market success is determined by levels of education and skills. College graduates earn much higher salaries than non-college graduates and experience lower unemployment rates than others in the labor force.

Education plays a significant role in terms of earnings potential and employability of workers. As the graphs below show, college graduates earn substantially higher salaries than non-college graduates. In addition, the unemployment rate for college graduates is much lower than that of others in the labor force. Generally, there are more job opportunities for college graduates than there are for workers with only a high school diploma and fewer years of education. Further, college graduates are less susceptible to layoff and unemployment.

Average Annual Earnings by Educational Attainment for People 18 Years Old and Over, United States

All People with Earnings, Ages 18 and Over \$\mathbb{K}\ \mathbb{K}\ \mathbb{K}\ \mathbb{S}\ \mathbb{S}

Unemployment Rate by Educational Attainment, United States 1996



Source: United States Department of Commerce, Bureau of the Census.



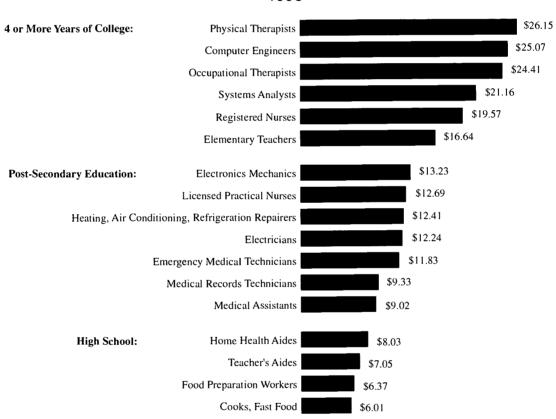


Education and Earnings in Specific Florida Occupations 1996

Persons with the most education and skills usually receive the highest earnings.

As expected, higher education relates to higher pay. Higher paying occupations, such as architects and physical therapists, require five or more years of college. Occupations, such as cooks, that require only high school level education pay substantially less. The comparison below focuses on 17 growing occupations.

Education, Occupations, Wages Per Hour in Florida 1996



Source: Florida Department of Labor and Employment Security, Division of Jobs and Benefits, Bureau of Labor Market and Performance Information.





Appendix and Technical Notes

The analysis in this publication was based on industry and occupational employment projections for the 1995-2005 period for the state of Florida. Data on population, labor force, and education and earnings were also analyzed. The Department of Labor and Employment Security, Division of Jobs and Benefits, Bureau of Labor Market and Performance Information produced the industry and occupational employment projections data for Florida.

Employment projections were developed for more than 700 occupations and 370 industries or industry groups that make up the economy as a whole. In this publication, the occupations were classified into 11 clusters that reflected similarities in the type of work. They are discussed in the order of their projected growth:

- 1. Health occupational cluster
- 2. Engineering, natural science, mathematics, and computer science occupational cluster
- 3. Education-related occupational cluster
- 4. Food, cleaning, personal, and protective service occupational cluster
- 5. Executive, administrative, and managerial occupational cluster
- 6. Marketing and sales occupational cluster
- 7. Mechanic, installer, and repairer occupational cluster
- 8. Transportation and material moving machine operator occupational cluster
- 9. Production occupational cluster
- 10. Administrative support including clerical occupational cluster
- 11. Construction trade and related occupational cluster

These 11 clusters accounted for 92.0 percent of employment in 1995 and 93.0 percent of the projected employment growth for the 1995-2005 period.

A cluster comprises a group of occupations based on the similarity of the job duties. It may include just one occupational division or be made up of occupations in more than one division. There are seven occupational divisions:





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Divisions:

- 1. Managerial and administrative occupations
- 2. Professional, paraprofessional, and technical occupations
- 3. Sales and related occupations
- 4. Clerical and administrative support occupations
- 5. Service occupations
- 6. Agriculture, forestry, fishing, and related occupations
- 7. Production, construction, operating, maintenance, and material handling occupations

Occupational Employment are classified as follows:

CLUSTER Division Subgroup Occupation

The information provided in this publication is intended to help individuals making career and business decisions, such as the following:

- · Persons planning their careers and choosing among the educational and training options.
- · School officials developing curriculum and courses of training.
- · Administrators and legislators formulating government policies.
- · Business executives creating marketing and personnel strategies.

This publication should assist the user in answering the following questions:

- · How many people, workers, and jobs are available?
- · How fast are the numbers of people, workers, and jobs expected to grow?





- · Which occupations will grow most rapidly or slowly?
- · Which occupations will employ the most or least workers?
- · Which industries will provide the most or fewest job opportunities?

The Bureau of Labor Market and Performance Information used the following methodology to project the industry, occupational, and job openings employment data used in this publication:

Assumptions

The projections are extrapolations of past trends combined with knowledge of the current events. The accuracy of the projections is dependent on the following assumptions:

- 1. The historical employment database is accurate.
- 2. Projections of independent variables in the regression equations and indicators of trends are reliable.
- 3. Industry-staffing patterns obtained by the Occupational Employment Statistics (OES) survey are accurate and the projected changes are reasonable.
- 4. The labor force separation rates used are accurate.
- 5. Changes in occupational employment estimated for the projection period result mostly from changes in industry employment.
- 6. The labor market projections are only one tool among several that can be used to understand future changes in industrial occupations.

Data Limitations

- · Special care was taken to ensure that data and projections are reasonable.
- · The data projections are indicators of trends rather than absolute numbers.
- · No distinctions are made between full-time and part-time jobs in the reported data.





Methodology for Industry Projections

- · Historical data on employment were compiled for Florida's counties and Metropolitan Statistical Areas (MSAs) at the three-digit Standard Industrial Classification (SIC) code levels.
- Data were obtained from average employment figures in the Current Employment Statistics (CES) Program.
- Total agricultural employment was obtained from the U.S. Department of Commerce, then distributed among three-digit industries using location percentages from the Employment, Wages, and Contributions (ES-202) Program.
- · Other employment information was taken from the data provided by the U.S. Bureau of the Census.
- A database covering the period 1972 to 1995 was created to make projections by combining county and MSA data for regions and industry groups.
- Linear and multiple regression analyses were used to project industry employment.
- · Shift-share analysis was employed in cases where acceptable regression statistics could not be used.

Methodology for Occupational Projections

- A matrix table was created from the annual Occupational Employment Statistics (OES) survey to compute ratios of employment by occupation in specific industries.
- · Occupational staffing patterns were applied to the base year industry employment.
- Occupational staffing patterns for the projected year were adjusted for occupational change over the projected period based on information received from the U.S. Department of Labor, Bureau of Labor Statistics.
- The projected occupational staffing patterns were applied to the projected year industry employment to produce projected occupational employment estimates.

Methodology for Projecting Job Openings

· Job openings were projected for industrial growth (expansion) and for vacating present positions (replacement).





- · Total future job openings equal expansion needs plus replacement needs.
- · Job openings due to expansion and growth are the annual average change in employment for this projected period.
- Openings due to replacement are based on separation rates by occupation derived from employment data gathered from the U.S. Department of Labor, Current Population Survey (CPS).

Wages

In this report, mean wages were provided for selective occupations. These data were produced by the Florida Department of Labor and Employment Security (FDLES), Division of Jobs and Benefits (J and B), Bureau of Labor Market and Performance Information (LMPI), in cooperation with the U.S. Department of Labor (USDOL), Bureau of Labor Statistics.

Wage rates for wage and salary workers in nonagricultural establishments are collected by an Occupational Employment Statistics (OES) survey. The Florida OES survey samples a total of 63,000 establishments over a 3-year period at an annual average of 21,000 employers. The survey excludes the self-employed, owners/partners of unincorporated firms, and unpaid family workers. Wage estimates are produced for over 700 occupations across all industries.

Wages for the OES survey are the straight-time, gross pay, exclusive of premium pay. Included are the base rate, cost-of-living allowances, guaranteed pay, hazardous-duty pay, incentive pay including commissions and production bonuses, and on-call pay. Excluded are back pay, jury duty pay, overtime pay, severance pay, shift differentials, non-production bonuses, and tuition reimbursements.

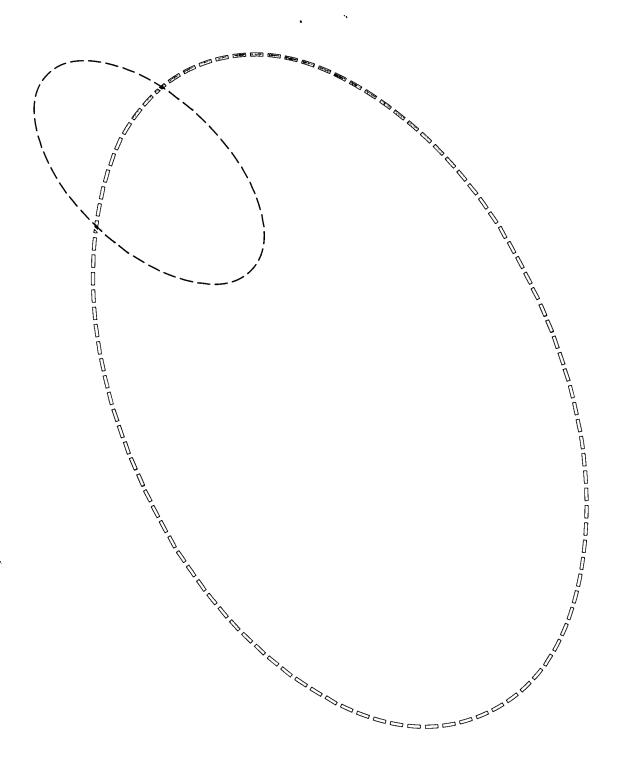
A mean wage and a median wage are calculated using wage data from the establishments in the industries that are the predominant employers for an occupation. Industries that do not typically employ workers in a given occupation are not included in the calculation of the mean and median wage.

Mean wage is the estimated total wages for an occupation divided by its estimated employment. Median wage is the estimated 50th percentile of the distribution of wages; 50 percent of the workers in an occupation earn wages below, and 50 percent earn wages above the median wage.

The reference date of the OES survey was the week that included October 12, November 12, or December 12 of 1996.













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